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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,747	03/30/2001	Michael J. Sinclair	03797.00037	4737

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EXAMINER

PRETLOW, DEMETRIUS R

ART UNIT PAPER NUMBER

2863

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,747

Applicant(s)

SINCLAIR ET AL.

Examiner

Demetrius R. Pretlow

Art Unit

2863

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-14, 16-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 12-14, 18 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 16, 17, 19, 20, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The first, second, third and fourth capacitive nodes being extend in an axial direction and are interdigitated with each in the following order along a direction perpendicular to the axial direction: first capacitive node, then third capacitive node, then second capacitive node, then fourth capacitive node is not disclosed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tareev (US 6,147,680). Tareev teach a first capacitive node and a second capacitive node each commonly coupled to a first electronic circuit node and a

third capacitive node and fourth capacitive node commonly coupled to a second circuit node. Note Figure 3 and Abstract. Tareev teach first, second, third and fourth capacitive nodes being disposed so as to be adjacent and interdigitated, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note column 3, lines 30-63, abstract and Figure 3. Tareev teach a fifth capacitive node and a fourth capacitive node each commonly coupled to the first circuit node; and a seventh capacitive node and an eighth capacitive node commonly coupled to the second capacitive node. Note Figure 2. Tareev teach the first, second, third, fourth, fifth, sixth, seventh, and eight capacitive nodes being disposed so as to be interdigitated. Tareev does not teach the shape of the capacitive nodes being substantially wedge shaped. Matthews et al. teach the capacitive nodes being substantially wedge shaped. Note Matthews et al. column 8, lines 65-68.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Tareev to include the teaching of Matthews et al. because it would allow the x and y coordinates of the cursor position to be determined. Note Matthews et al. column 10, lines 10-18.

In reference to claim 17, Tareev teach the first, second, third and fourth capacitive nodes each comprise an etched conductive tracing on a substrate. Note Tareev column 2, lines 50-60 and Figure 3.

Claim 19, contains limitations similar to those in claim 17 which was discussed above. The wedge shaped capacitive nodes are equivalent to the triangular shaped capacitive nodes.

In reference to claim 20, Tareev teach a first capacitive node and a second capacitive node each commonly coupled to a first electronic circuit node and a third capacitive node and fourth capacitive node commonly coupled to a second circuit node. Note Figure 3 and Abstract. Tareev teach first, second, third and fourth capacitive nodes being disposed so as to be adjacent and interdigitated, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note column 3, lines 30-63, abstract and Figure 3. Tareev teach wherein the first, second, third and fourth capacitive nodes being extend in an axial direction and are interdigitated with each in the following order along a direction perpendicular to the axial direction: first capacitive node, then third capacitive node, then second capacitive node, then fourth capacitive node. Note Tareev Figure 3. Tareev does not teach the shape of the capacitive nodes being substantially wedge shaped.

Matthews et al. teach the capacitive nodes being substantially wedge shaped. Note Matthews et al. column 8, lines 65-68.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Tareev to include the teaching of Matthews et al. because it would allow the x and y coordinates of the cursor position to be determined. Note Matthews et al. column 10, lines 10-18.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 22 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Tareev. Tareev teach a first capacitive node and a second capacitive node each commonly coupled to a first electronic circuit node and a third capacitive node and fourth capacitive node commonly coupled to a second circuit node. Note Figure 3 and Abstract. Tareev teach first, second, third and fourth capacitive nodes being disposed so as to be interdigitated, wherein the pointing member interacts with at least one of the first, second, third, and fourth capacitive nodes. Note column 3, lines 30-63, abstract and Figure 3. Tareev teach an insulating material disposed over the first and second circuit nodes. Note Tareev column 2, lines 51-53 and Figure 1.

Tareev does not explicitly teach a groove formed in the insulating material running in the single dimension, however this would be inherent to the touchpad of Tareev in order to provide an area for a finger or stylus to be placed. Note Column 2, lines 50-60.

In reference to claim 23, Tareev does not explicitly teach groove formed in the insulating material running in a the axial direction, the first, second, third, and fourth capacitive nodes also extending in the axial direction, wherein the pointing member

Art Unit: 2863

interacts with at least one of the second, third, and fourth capacitive nodes, however this would be inherent to the touchpad of Tareev in order to provide an area for a finger or stylus to be placed. Note Column 2, lines 50-60.

Allowable Subject Matter

7. Claims 1-10,12-14,18,24-26 are allowed.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetrius R. Pretlow whose telephone number is (703) 308-6722. The examiner can normally be reached on Monday - Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow, can be reached at (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Demetrius R. Pretlow

Patent Examiner

Demetrius Pretlow

1/5/04

John Barlow
John Barlow
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